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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,837

02/17/2006

Emile Johannes Karel Verstegen

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

BERMAN, SUSAN W

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,837	Applicant(s) VERSTEGEN ET AL.	
	Examiner /Susan W. Berman/	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

The amendments to the specification filed 10-23-08 have been entered.

The rejections of claims 1 and 3-11 under 35 U.S.C. 112, second paragraph, are withdrawn.

The rejections of record have been modified to reflect the amendments to claims 2-5.

Response to Arguments

Applicant's arguments filed 10-23-2008 have been fully considered but they are not persuasive. Applicant argues that none of the cited references teaches a "non-leaching" adhesive. This argument is not persuasive because each of the cited references teaches compositions comprising (meth)acrylate monomers, allylic monomers, or norbornene monomers or multifunctional thiol monomers in combination with ethylenically unsaturated monomers, as required in instant claim 1 and would therefor, in the absence of evidence to the contrary, be expected to provide "non-leaching" compositions. There is no comparative evidence of record to the contrary. The comparative example in the instant specification comprises an epoxy-amine adhesive that is not representative of the cited prior art.

Applicant requests clarification of the disclosure of the limitations of claim 5 in Tokuda et al. Tokuda et al. teach an adhesive compositions comprising a bisphenol type epoxy (meth)acrylate, thus disclosing 2,2-bis[4-(3-acryloyloxy-2-hydroxypropoxy)phenyl]propane, which is the chemical name for bisphenol epoxy di(meth)acrylate. See column 3, lines 11-23.

The rejections of record have been amended to rejections under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the cited

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references. Applicant is invited to further limit the claims to distinguish over the cited references or to provide comparative evidence representative of the cited art to show that the disclosed compositions would not provide “non-leaching” adhesives.

Drawings

Corrected drawings in compliance with 37 CFR 1.121(d) have been received in reply to the Office action and are accepted. Figures 1a - 1c, 2, 3 and 4 are now designated as --Prior Art-- because only that which is old is illustrated.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. What is disclosed is a “at least one of said monomers, not being a thiol, is provided with at least two functional groups, which groups take part in the polymerization process” at page 2, lines 21-23. The examiner has not found any description of thiol monomers having functional or polymerizable groups other than additional thiol groups. See page 2, line 31, to page 3, line 2.

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What is described is thiol-ene systems comprising monomers having multiple thiol groups and monomers having multiple allyl groups that react with the thiol groups.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 2-8, claim 1 recites “A curable adhesive system” and thus does not provide antecedent basis for the recitation in claims 2-8 “A non-leaching, curable adhesive system”. It is suggested that claims 2-8 should read “A curable adhesive system according to claim 1 wherein...”. Claim 1 already includes that the adhesive system is a non-leaching system.

With respect to claim 2, It is not clear what kinds of “functional polymerizable groups” are intended to be present in the thiol monomer. It is noted that thiol groups are functional groups and also polymerizable groups. If applicant intends to claim monomers containing one or more thiol groups and two additional functional and/or polymerizable groups, it should be so stated and the kinds of functional polymerizable groups should be clearly set forth in the claim.

Claim Rejections - 35 USC § 102/103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 1, 5-11 and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kitsunai et al (6,627,287, filed 04-25-2001). Kitsunai et al disclose an adhesive composition having strong adhesion for bonding an optical disc comprising a silane coupling agent, a UV curable compound and a photopolymerization initiator. Photopolymerizable monomers taught include monofunctional and polyfunctional (meth)acrylates (column 3). Initiators are taught in column 4, lines 3-31. Example 2 discloses a composition comprising bisphenol A type epoxy acrylate and tripropylene glycol diacrylate in combination with a phosphine oxide photoinitiator and methacryloxypropyltrimethoxysilane. Thus composition (2) recited in claim 18 is disclosed. It is noted that Kitsunai et al also teach 1,6-hexanediol diacrylate monomers, but do not mention an azobis initiator. Kitsunai et al teach the monomer recited in instant claim 5.

Claims 1, 2 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ha et al (6,180,200). Ha et al disclose radiation curable pressure sensitive adhesive compositions for bonding digital discs. Ha et al teach monomers such as acrylates and mono-, di- or tri-thiols, photoinitiators and adhesion promoters such as methacrylylalkyltrialkoxysilanes. See column 3, line 51, to column 4, line 17, column 9, lines 30-67, column 10, lines 11-58, column 11, lines 7-19, column 11, lines 51-54, and column 14, lines 26-34.

Claims 1 and 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tokuda et al (6,017,603). Tokuda et al

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disclose a UV curable adhesive composition for bonding DVDs. The composition comprises (A) a bisphenol A epoxy acrylate, (B) a urethane (meth)acrylate, (C) a (meth)acrylate monomer other than (A) or (B) and a photoinitiator. See column 3, lines 11-23, column 5, line 51, to column 6, line 6, column 6, lines 55-57, column 7, lines 16-38 and the Examples. Tokuda et al teach compositions comprising the epoxy (meth)acrylate recited in instant claim 5.

Claims 1, 2, 4 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Iida (6,171,675). Iida discloses UV curable adhesive composition for preparing optical discs comprising acrylate-functional compounds, a thiol compound and a photoinitiator. Thiol compounds corresponding to those recited in instant claim 4, such as trimethylolpropane trithiopropionate or pentaerythritol tetrakisithiopropionate, are taught in column 2, lines 49-67. Polyfunctional acrylates are taught in column 3, lines 57-67.

Claims 1, 3 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (5,366,812). Takahashi et al disclose compositions comprising a thermoplastic saturated norbornene polymer. Crosslinkers such as triallyl isocyanurate can be added to increase strength (column 10, lines 30-41). Addition of a surface active agent is taught in column 8, line 64. The compositions are suitable for optical materials (column 12, lines 40-45). The compositions disclosed by Takahashi et al comprise a norbornene-functional material and a crosslinker, such as triallyl isocyanurate, and an initiator for thermal- or photo- polymerization. Therefore, in the absence of evidence to

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the contrary, the disclosed curable compositions would be expected to provide a non-leaching, adhesive system, as set forth in the instant claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Green et al (4,308,367) disclose compositions comprising a compound (b) containing two mercaptan groups and a compound (a) containing a phenolic hydroxyl group and at least two (meth)allyl groups.

Petersen et al (6,201,099) discloses multireactivity polymercaptans.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Susan W. Berman/ whose telephone number is 571 272 1067.

The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB
5/14/2008

/Susan W Berman/
Primary Examiner
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